

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-6 are presently active in this case. The present Amendment amends Claims 1 and 3-6.

The outstanding Office Action acknowledged consideration of the documents submitted on December 24, 2002, January 24, 2003, and March 20, 2003. Claims 1-6 were rejected under 35 U.S.C. § 102(e) as being anticipated by Hokodate et al. (U.S. Patent No. 6,353,203).

Applicants acknowledge with appreciation the consideration of the submitted documents.

In response to the rejection of Claims 1-6 under 35 U.S.C. § 102(e), Claims 1, 3-6 have been amended to clarify Applicants' invention. In light of the changes to the independent claims, Applicants respectfully request reconsideration of the outstanding rejections as discussed next.

The present amendment amends independent Claims 1, 3-6 to recite that the corrector lens of the temperature compensation unit provides a refraction power to the coupled light beam in one of a main scanning direction and a sub-scanning direction on the scanned surface independently. These features find support in the disclosure as originally filed, for example at page 20, lines 12-25 and non-limiting Fig. 3. These changes, therefore, are not believed to raise a question of new matter.¹

¹ See MPEP 2163.06 stating that "information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter."

The outstanding Office Action states that Fig. 44 of the Hokodate et al. patent shows a coupling lens for coupling the light beam (L) from the light source and a temperature compensation unit comprising control circuit (124) and a corrector lens (121), which has a positive power to converge the light beam from the coupling lens in at least one of a main scanning direction and a sub-scanning direction. The Hokodate et al. patent, however, fails to teach or suggest the optical scanning system, as recited in the amended claims.

Specifically, the movable lens 121 disclosed by Hokodate et al. (figure 44; column 32, lines 20-51) is a movable lens included in the collimator lens 120. Focusing of the laser beam L on a scanned surface W is performed according to a change in the position of the movable lens 121 in the direction of its optical axis. The change of the movable lens position is controlled in accordance with a temperature change detected by the temperature detecting unit.

The Hokodate et al. patent, however, fails to teach the corrector lens of the temperature compensation unit as recited in Applicants' claims. In the Hokodate et al. system, movement of the movable lens 121 in the direction of the optical axis would appear to change the $f\theta$ characteristics (the constant-velocity characteristics) of the converging lens 20, which would cause the quality of an image on the scanned surface to deteriorate.

As recited in the independent claims, in the optical scanning system of the Applicants' invention, the focal-point position of the light beam is adjusted by directly varying a focusing effect of a corrector lens on the light beam by a controlled amount of movement of the corrector lens along its optical axis that corresponds to the temperature change. The corrector lens (shown as element 3 in Applicant's Fig. 1 and as elements 11-12 in Fig. 3) provides a refraction power to the coupled light beam in one of the main scanning direction or the sub-scanning direction on the scanned surface *independently*.

By contrast, in the Hokodate et al. optical scanning system, focusing is executed according to a change in the position of the movable lens 121 in the direction of the optical axis. The Hokodate et al. patent does not teach or suggest adjusting the focal-point position of the light beam in one of the main scanning direction or the sub-scanning direction *independently* in accordance with the temperature change, as in Applicants' claimed invention. Furthermore, such an adjustment would be difficult to perform with the Hokodate et al. optical scanning system without deteriorating image quality, so that a person of ordinary skill in the art would not be motivated to modify the teachings of the Hokodate et al. patent in order to arrive at Applicants' claimed invention.

In view of the above, the prior art fails to teach or suggest every feature recited in Applicants' claims, so that Claims 1-6 are believed to be patentably distinct over the cited prior art. Accordingly, Applicants respectfully traverse, and request reconsideration of, the rejections based on the Hokodate et al. patent.²

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-6 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

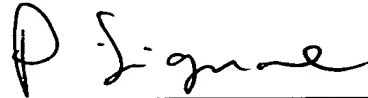
The present amendment is submitted in accordance with the provisions of 37 C.F.R. § 1.116, which after Final Rejection permits entry of amendments placing the claims in better form for consideration on appeal. As the present amendment is believed to overcome

² See MPEP 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," (Citations omitted) (emphasis added). See also MPEP 2143.03: "All words in a claim must be considered in judging the patentability of that claim against the prior art."

outstanding rejections under 35 U.S.C. § 102, the present amendment places the application in better form for consideration on appeal. In addition, the present amendment is not believed to raise new issues since the changes to the claims merely clarify Applicant's claimed invention. It is therefore respectfully requested that 37 C.F.R. § 1.116 be liberally construed, and that the present amendment be entered.

Respectfully submitted,

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